STATE OF NEW YORK PUBLIC SERVICE COMMISSION

OPINION NO. 98-18

CASE 98-C-0690 - Proceeding on Motion of the Commission to Examine Methods by which Competitive Local Exchange Carriers can Obtain and Combine Unbundled Network Elements.

CASE 95-C-0657 - Joint Complaint of AT&T Communications of New York, Inc., MCI Telecommunications Corporation, WorldCom, Inc. d/b/a LDDS WorldCom and the Empire Association of Long Distance Telephone Companies, Inc. Against New York Telephone Company Concerning Wholesale Provisioning of Local Exchange Service by New York Telephone Company and Sections of New York Telephone's Tariff No. 900.

OPINION AND ORDER CONCERNING
METHODS FOR NETWORK ELEMENT RECOMBINATION

Issued and Effective: November 23, 1998

TABLE OF CONTENTS

	<u>Page</u>
APPEARANCES	
INTRODUCTION	1
THE INSTANT PROCEEDING	3
GENERAL FINDINGS	6
Proposed Methods and Parties' Concerns	6
Proposed General Findings and Exceptions	8
Discussion	10
THE OPTIONS FOR NETWORK ELEMENT COMBINATION AND SPECIFIC FINDINGS	11
Option I Physical Collocation and Shared Cage (Bell Atlantic-New York)	12
1. Proposed Findings and Exceptions	14
2. Discussion	16
Option II Secured Collocation Open Physical Environment (SCOPE) (Bell Atlantic-New York)	17
 Proposed Findings, Exceptions, and Collaboration 	19
2. Discussion	20
Option III Identified Space Collocation (COVAD)	20
1. Proposed Findings and Exceptions	22
2. Discussion	22
Option IV Virtual Collocation (Bell Atlantic-New York)	23
1. Proposed Findings and Exceptions	25
2. Discussion	25
Option V Assembly Room and Assembly Point (Bell Atlantic-New York)	25
1. Proposed Findings and Exceptions	29

CASES 98-C-0690 and 95-C-0657

TABLE OF CONTENTS

	<u>Page</u>
2. Discussion	29
Option VI Recent Change Capability (AT&T)	30
1. FeasibilityThe Factual Issue	30
2. Physical Separation and Reconnection the Legal Issue	33
3. Discussion	35
THE TWO-COLLOCATION CENTRAL OFFICES	36
Proposed Findings and Exceptions	37
Discussion	38
CONCLUSION	39
ORDER	40
APPENDICES	

APPEARANCES

FOR NYS DEPARTMENT OF PUBLIC SERVICE:

Andrew Klein, Three Empire State Plaza, Albany, New York 12223-1350.

FOR BELL ATLANTIC-NEW YORK:

Randal S. Milch, and Donald Rowe, 1095 Avenue of the Americas, New York, New York 10036.

FOR WORLDCOM, INC.:

Roland, Fogel, Koblenz & Carr (by Keith J. Roland), One Columbia Place, Albany, New York 12207.

FOR U.S. DEPARTMENT OF THE ARMY:

Robert A. Ganton, 901 N. Stuart Street, Suite 713, Arlington, Virginia 22203-1837.

FOR TIME WARNER COMMUNICATIONS HOLDINGS, INC.:

LeBoeuf, Lamb, Greene & MacRae (by Brian Fitzgerald, and David Poe), 99 Washington Avenue, Suite 2020, Albany, New York 12210.

FOR MCI TELECOMMUNICATIONS CORP. AND MCIMETRO ACCESS TRANSMISSION SERVICES, INC.:

Kimberly Scardino, and Kimberly A. Wild, 5 International Drive, Rye Brook, New York 10573-1095.

FOR AT&T COMMUNICATIONS OF NEW YORK, INC.:

Richard H. Rubin, 32 Avenue of the Americas, New York, New York 10013 and Sidley & Austin (by Mark E. Haddad), 1722 Eye Street, N.W., Washington, D.C. 20006.

FOR SPRINT TELECOMMUNICATIONS:

Karen Sistrunk, 1850 M Street, N.W., Washington, D.C. 20036.

FOR LCI INTERNATIONAL TELECOM CORP.:

Morganstein & Jubelirer (by Rocky Unruh), Spear Street Tower, 32nd Floor, San Francisco, CA 94105.

APPEARANCES

FOR COVAD COMMUNICATIONS:

Thomas M. Koutsky, and Susan Jin Davis, 7117 Whetstone Road, Alexandria, VA 22396.

FOR INTERMEDIA COMMUNICATIONS, INC.:

FOR E.SPIRE COMMUNICATIONS, INC.:

FOR ALLEGIANCE TELECOM OF NEW YORK, INC.:

Kelley, Drye & Warren, LLP (by Jonathan E. Canis and Ross Buntrock), 1200 19th Street, N.W., Suite 500, Washington, D.C. 20036.

FOR DEPARTMENT OF JUSTICE ANTITRUST DIVISION:

Frances Marshall, 1401 H Street, N.W., Suite 800, Washington, D.C. 20530.

FOR RCN TELECOM SERVICES:

FOR USN COMMUNICATIONS, NC.:

FOR HYPERION TELECOMMUNICATIONS, INC.:

Swidler & Berlin (by Antony Richard Petrilla), 3000 K Street, N.W., Suite 300, Washington, D.C. 20007.

STATE OF NEW YORK PUBLIC SERVICE COMMISSION

COMMISSIONERS:

Maureen O. Helmer, Chairman Thomas J. Dunleavy James D. Bennett

CASE 98-C-0690 - Proceeding on Motion of the Commission to Examine Methods by which Competitive Local Exchange Carriers can Obtain and Combine Unbundled Network Elements.

CASE 95-C-0657 - Joint Complaint of AT&T Communications of New York, Inc., MCI Telecommunications Corporation, WorldCom, Inc. d/b/a LDDS WorldCom and the Empire Association of Long Distance Telephone Companies, Inc. Against New York Telephone Company Concerning Wholesale Provisioning of Local Exchange Service by New York Telephone Company and Sections of New York Telephone's Tariff No. 900.

OPINION NO. 98-18

OPINION AND ORDER CONCERNING
METHODS FOR NETWORK ELEMENT RECOMBINATION

(Issued and Effective November 23, 1998)

BY THE COMMISSION:

INTRODUCTION

The purpose of this proceeding is to ensure that Bell Atlantic-New York provides competitors with unbundled network elements and means to combine those elements themselves. On April 6, 1998, Bell Atlantic-New York undertook specific commitments¹ in connection with its anticipated application to the FCC to provide in-region long distance service in New York State, pursuant to §271 of the Telecommunications Act of 1996 (the Act).² Included is a commitment to provide competitors certain already-combined elements pursuant to express terms and conditions.

Case 97-C-0271, Pre-filing Statement of Bell Atlantic-New York, filed April 6, 1998 (the Pre-filing).

² 47 U.S.C. §271.

With respect to the combination of network elements, in the Pre-filing Bell Atlantic-New York undertook to provide competitive local exchange carriers (LECs)

> the ability to recombine elements themselves through the use of smaller collocation cages, shared collocation cages, and through virtual collocation. In addition, Bell Atlantic-New York will demonstrate to the Public Service Commission that competing carriers will have reasonable and non-discriminatory access to unbundled elements in a manner that provides competing carriers with the practical and legal ability to combine unbundled elements. Among the issues to be discussed in Bell Atlantic-New York's demonstration is the feasibility of 'non-cage collocation'. Bell Atlantic-New York will continue its current, ubiquitous offering of the platform until such methods for permitting competitive LECs to recombine elements are demonstrated to the Commission. This commitment, when met, will permit competing carriers to purchase from Bell Atlantic-New York and connect all of the pieces of the network necessary to provide local exchange service to their customers. 1

In the Pre-filing, Bell Atlantic-New York also committed to provide competitors with combinations of elements, including the combination of its loop with its port (the UNE platform) upon specified terms and under specified conditions.²

In sum, Bell Atlantic-New York offered five methods to serve this purpose; AT&T, Covad, and Intermedia also proposed methods. After exhaustive analysis of the strengths and shortcomings of these options, consideration of competitors' proposals, and collaboration, we are requiring the provision of

-

¹ Bell Atlantic-New York Pre-filing, p. 10.

Among these conditions, Bell Atlantic-New York will provide the UNE platform for certain services without an additional or glue charge to serve residential customers for four and six years depending on region. It will similarly provide the UNE platform to serve business customers with a glue charge varying by geographic area, with the exception that in New York City central offices in which there are already two collocated competitive LECs providing service, the platform will not be available to serve business customers.

every technically feasible method available today. These methods, with certain modifications, are sufficient to support foreseeable competitive demand in a reasonable and non-discriminatory manner, in conjunction with its provision of element combinations pursuant to the Pre-filing. We expect Bell Atlantic-New York's commitment to provide competitive carriers with already-combined network elements to moderate the considerable competitor demand for collocation space and work force effort.

These methods, with modifications detailed herein, and subject to the Pre-filing, will be approved upon Bell Atlantic-New York demonstrating (1) the actual availability of the tariffed collocation offerings and other recombination methods; and (2) that each New York City central office in which two competitors are presently collocated and providing service has space for implementation of a satisfactory range of recombination methods.

Upon verification of these conditions by Chairman Helmer in the context of an application by Bell Atlantic-New York to the FCC to provide in-region interLATA service, this approval will take effect.

THE INSTANT PROCEEDING

We instituted this proceeding to define the method or methods by which competing carriers will combine elements and directed Bell Atlantic-New York to propose methods by which competitors could combine network elements and to illustrate how those methods meet Bell Atlantic-New York obligations under the Pre-filing and the Act, providing an opportunity for parties to comment and propose alternatives. Administrative Law Judge Eleanor Stein presided over the fact-finding effort. Her May 14, 1998 ruling instructed parties to include an explanation of how the method would operate; examples of other jurisdictions,

Case 98-C-0690, <u>Combining Unbundled Elements</u>, Order Initiating Proceeding (issued May 6, 1998).

companies, or industries where the method was working; an explanation of how the proposed method could be implemented in a commercially reasonable time period; documentation of the cost of the method; and an analysis of the impact of adoption of the method upon end-use customer service. Subsequently, the parties were requested to demonstrate how each proposed option was susceptible to making the transition to a facilities-based competitive market strategy. Finally, the schedule included a period for collaborative working sessions.

This inquiry opened with Bell Atlantic-New York and other parties proposing options for provision of network elements in such a way as to allow carriers to combine them. From the filings, six distinct options were distilled, which were named and numbered to serve as the organizing principle for the mass of technical, financial, and policy data provided by the parties. From June 29, 1998 through July 1, 1998, at an on-the-record technical conference, advisory Staff and parties' witnesses and counsel examined the offered proposals. Parties presented six exhibits, and a transcript of 784 pages was compiled. Parties presented expert witnesses both to sponsor parties' own options, and to critique or support options sponsored by others.

_

¹ Parties filing comments, and in some cases proposing options, were: United States Department of Defense and all Federal Executive Agencies (DOD); Covad Communications Company (Covad); Metropolitan Telecommunications (Metropolitan); Cablevision Lightpath (Cablevision), NextLink New York, L.L.C. (Nextlink) and Association for Local Telecommunications Services (ALTS); AT&T Communications of New York, Inc. (AT&T); Time Warner Communications Holdings, Inc. (Time Warner); North American Telecom (North American); Hyperion Telecommunications, Inc. (Hyperion), LCI International Telecom Corp. (LCI); Sprint Communications Company, L.P. (Sprint); WorldCom Inc. (WorldCom); Telecommunications Resellers Association (TRA); USN Communications, Inc. (USN); MCI Telecommunications Corporation (MCI); Teleport Communications Group (TCG); Competitive Telecommunications Association (CompTel); Intermedia Communications, Inc. (Intermedia); RCN Telecom Services of New York, Inc. (RCN); and e.spire Communications, Inc. (e.spire).

memoranda. Members of the advisory Staff team also met with vendors of proposed technologies and examined installations of several offered options.

On May 27, 1998, Bell Atlantic-New York filed its Methods for Competitive LEC Combinations of Unbundled Network Elements. Bell Atlantic-New York offered both physical and virtual collocation to access and combine the complete range of unbundled network elements, asserting it increased the availability and lowered the cost of physical collocation with smaller cages, shared cages, and common space. It also offered competitive LECs the ability to combine voice grade unbundled elements in assembly rooms and assembly points. On June 23, 1998, Bell Atlantic-New York filed a supplemental document including service descriptions for its assembly room and assembly point offerings, and detailing the common space physical collocation option, renamed Secured Collocation Open Physical Environment (SCOPE).

Two other parties offered proposals. COVAD proposed an identified space collocation option, calling for competitive LEC equipment to be placed alongside the incumbent's frames, as in a virtual collocation arrangement. Unlike virtual collocation, however, COVAD's proposal envisioned the competitor installing and maintaining its equipment, employing some range of security measures to protect the incumbent's equipment. Finally, AT&T proposed recent change capability, a software-based option in a preliminary stage of development, to allow competitors to connect loops and ports for existing Bell Atlantic-New York lines without manual disconnects and reconnects.

On August 4, 1998, Judge Stein issued Proposed Findings, including recommendations concerning legal issues, general conclusions, and specific findings of fact regarding each of the six options. She remitted several issues to the parties for collaborative discussion.

On August 13, 1998, Administrative Law Judge Jaclyn A. Brilling convened the collaboration phase; participating were Bell Atlantic-New York, AT&T, LCI, MCI,

Sprint, Time Warner, Intermedia, WorldCom, COVAD, and advisory Staff. In order to accommodate those parties wishing to proceed expeditiously as well as those indicating workload and resource constraints, she convened a working group for issue identification and proposal drafting. The larger group, having been kept apprised of the progress of the working group and having provided it comments, convened the week of September 14, 1998. Some issues were resolved; as to others, the parties were unable to agree.

Filing initial and reply briefs on exception are Bell Atlantic-New York, WorldCom, DOD, Time Warner, Sprint, RCN and USN, TRA, Qwest/LCI, CompTel, e.spire and Intermedia, COVAD, AT&T, and MCI.

GENERAL FINDINGS

Proposed Methods and Parties' Concerns

The methods proposed by Bell Atlantic-New York shared an underlying design, represented in that company's Exhibit 1 (Appendix A). They are all manual methods, and require a Bell Atlantic-New York technician to make numerous manual cross connections, a configuration parties termed the "daisy chain." In contrast, competitors asserted providing service to an existing Bell Atlantic-New York customer requires far fewer manual connections. Within this structure, Bell Atlantic-New York offered to make available a variety of mechanisms.

Competitors expressed interest in utilizing one or another mechanism, depending upon their own facilities and market entry plans. Competitors also expressed some common concerns.

Many competitors considered all the manual proposals technologically retrograde, raising the possibility of

_

¹ RCN's Brief, p. 3; WorldCom's Brief, p. 3.

introducing additional opportunities for human error. They also viewed them as discriminatory, compared to Bell Atlantic-New York's single cross connection to connect a link and a port for its own customer.

A second common concern of competitors was the potential for exhaustion of collocation space, both building space and MDF space. Moreover, facilities-based competitors that employ collocation for their own networks warned that finite space resources will be used unnecessarily for competitor element combination purposes.

Finally, competitors stressed the limitations on Bell Atlantic-New York's capacity to fill collocation orders in a timely manner. Bell Atlantic-New York has committed to provide physical collocation, if certain preconditions are met, within 76 business days; it will provide virtual collocation in 105 business days. According to the Pre-filing, Bell Atlantic-New York stated it could provision 15 to 20 new collocation arrangements monthly. Competitor parties saw no significant time savings in the modified collocation options: the various collocation installations all require approximately the same intervals and work force. Further, Bell Atlantic-New York's witness testified it could take from six to 18 months to augment an MDF if additional space were needed.

Customers served by digital loops—at the close of evidence 7% but a growing proportion—are combined or multiplexed onto a digital carrier, typically Integrated Digital Loop Carrier (IDLC), and transmitted to a central office. These loops are not individually separated and cross—connected at the Main Distribution Frame (MDF), but go through a digital cross connection directly into the switch. To employ any of the incumbent's methods may require replacing the digital loop with copper to allow a manual connection.

WorldCom's Brief, p. 6.

³ Bell Atlantic-New York Pre-filing, p. 23.

⁴ Tr. 276.

Proposed General Findings and Exceptions

The Judge proposed criteria concerning the ultimate issue in this proceeding: whether any, or some combination of, the options offered by Bell Atlantic-New York and other parties comply with the incumbent's duty to provide unbundled network elements in a manner that allows requesting competitive carriers to combine them in order to provide telecommunications service. She reasoned that this incumbent local exchange carrier obligation implied, at its core, that competitors have a menu of methods to combine elements that, while it need not be perfect, is commercially reasonable and nondiscriminatory with respect to ubiquity, cost, timely provision, service quality, and reliability. To be commercially reasonable, the menu must allow a competitor to obtain and combine network elements on a scale that is consistent with current expectations of competitive demand volume.

Options were examined for ease of competitive entry and for compatibility with the eventual development of facilities—based competition in New York. Options were examined for impact on the service to end-users, customers of both incumbent and competitor carriers; and their impact on the security and reliability of the network. Finally, options were analyzed for ease of customer migration to a competitor's own facilities, to another competitive LEC, or back to Bell Atlantic-New York.

Without reaching the issue of whether collocation, in the abstract, constituted as a matter of law a nondiscriminatory form of obtaining and combining elements, the ALJ proposed a finding as a matter of fact on this record and under these conditions. In her view, this record indicated that Bell Atlantic-New York's collocation-based options alone, absent provision of the platform (or another electronic or otherwise seamless and ubiquitous method), were insufficient to support combination of elements to serve residential and business customers on any scale that could be considered mass market entry. Given this record, at this time, absent the provision of the element platform pursuant to the Pre-filing, she considered

Bell Atlantic-New York out of compliance with $\S251(c)(3)$ and, consequently, $\S271(c)(2)(B)(ii)$. With the Pre-filing in place, however, the Judge recommended that Bell Atlantic-New York's options—with modifications—provided adequate opportunity for market entrants to serve residential and business customers.

While not excepting, MCI requests clarification of the proposed general findings with respect to the four-to-six year sunset provisions of the Pre-filing. In MCI's view, until an alternative element combination method is available, Bell Atlantic-New York must provide the Pre-filing platform; and Bell Atlantic-New York should not be allowed to withdraw the platform if an alternative becomes available earlier. AT&T excepts to the proposed general findings on the grounds that Bell Atlantic-New York must make an electronic recombination method available to competitors in all central offices, to serve all customers, including the most technologically advanced; and that this availability is a precondition to the institution of combination or glue charges and other limitations contained in the Pre-filing.¹

WorldCom contends the Pre-filing itself is discriminatory and violates the Act's cost provisions, §252. Time Warner, while supporting the Judge's menu approach, also excepts to the incorporation of the Pre-filing on the ground that provision of the platform without additional or glue charges disadvantages facilities-based competition. It urges us to reject the Pre-filing terms, noting that any efficiency loss resulting from the addition of manual processes should apply equally to all competitors.

Bell Atlantic-New York excepts to the recommendation that it be required to provide the unbundled element platform

-9-

by Chairman Helmer.

-

AT&T relies upon the Act requirement that the incumbent LEC provide interconnection with its network at any technically feasible point. 47 U.S.C. §251(c)(2)(B). This decision does not reach the issue of Bell Atlantic-New York's offerings' compliance with §§251, 252, and 271, which will be determined

until a comparably ubiquitous method is available to serve the mass market. In Bell Atlantic-New York's view, the evidence demonstrated that its menu of combination alternatives supports mass market entry; while the only other software proposal--AT&T's--is costly and years away from development. Bell Atlantic-New York also excepts to a requirement of ubiquity, noting the absence of an express commitment or statutory requirement. However, it also asserts its expanded physical collocation offerings meet that test.

Bell Atlantic-New York excepts as a legal matter to the proposed finding that the availability of the Pre-filing or its equivalent is necessary to the acceptability of Bell Atlantic-New York's recombination menu, claiming this recommendation obliterates the distinction between competitor combination and the incumbent's platform. Time Warner also excepts, opposing the Pre-filing UNE platform on the ground it will discourage investment in facilities-based competition, and suggests the platform only be available at a premium.

Discussion

This record shows that Bell Atlantic-New York's menu of collocation-based options, along with the provision of the Prefiling platform, should be sufficient to support recombination of elements to serve residential and business customers on a mass market scale. The availability of the platform and lesser combinations is expected to attract considerable competitive traffic. With the modifications discussed below, the collocation-based offerings are reasonable and non-discriminatory.

This conclusion is based in part upon an assumption that the immediate availability of the UNE platform will ease the competitive pressure on Bell Atlantic-New York's collocation provisioning capabilities. To what extent that assumption is justified will depend largely upon the unfolding market choices of the competitive LECs. In the course of this proceeding, competitors made it abundantly clear that they have widely

divergent strategies and requisites. But clearly the UNE platform will be an important means of entering the local market in New York. Bell Atlantic-New York's ability to meet demand for collocation will be examined in the context of the §271 proceeding. This conclusion strikes a balance, making recombination of elements accessible to competitors seeking to enter the market with few or no facilities of their own, without making that the only economically viable market entry choice. Accordingly, parties' exceptions challenging the terms of the Pre-filing are denied.

Based on the parties' filings, comments upon options, evidence adduced at and following the technical conference, post-conference briefs, the advisory Staff investigation, review of the records in related pending Commission proceedings, and briefs and reply briefs on exception, we conclude that the methods offered by Bell Atlantic-New York to competitors to obtain and combine network elements, as modified by the collaboration, comply with the Pre-filing, inasmuch as the availability of the unbundled network element platform under the Pre-filing terms diminishes mass market pressure on collocation. We will apply the criteria and standards established in this opinion to review the compliance filings associated with the No. 916 tariff.

THE OPTIONS FOR NETWORK ELEMENT COMBINATION AND SPECIFIC FINDINGS

Parties proposed six methods: (1) physical collocation (traditional, small cage, and shared cage) (Bell Atlantic-New York); (2) cageless collocation or SCOPE (Bell Atlantic-New York); (3) identified space collocation (Covad and Intermedia); (4) virtual collocation with robot (Bell Atlantic-New York); (5) assembly room/point (Bell Atlantic-New York); and (6) recent change memory (AT&T). The Judge recommended findings as to each option taking into consideration the sponsors' initial filing and other parties' comments; the technical conference; subsequent responses to data requests; Staff conferences with parties and Staff investigation; the parties' post-technical conference

briefs; and portions of the records and filings of related proceedings, where appropriate. Our specific conclusions, based on this record, collaborative consensus where available, and initial and reply briefs on exception, follow.

Option I -- Physical Collocation and Shared Cage (Bell Atlantic-New York)

Traditional physical collocation generally allows a competitive LEC to place its equipment in an environmentally conditioned, secured area of Bell Atlantic-New York's central office. Traditionally, Bell Atlantic-New York constructed 100square-foot or larger locked wire fenced-in areas, or cages, in a segregated area of its central office building, within which a competitive LEC was allowed to place its transmission and multiplexing equipment.²

Bell Atlantic-New York offered to construct less costly 25-square-foot cages, and to allow caged areas to be shared among competitive LECs at no additional cost. A collocated competitive LEC may host another competitive LEC. Bell Atlantic-New York would charge the host competitive LEC but accept orders from both the host and the subsequent occupants.

Of its over five hundred New York central offices, Bell Atlantic-New York at the close of the evidence had 61 with physical collocation. It asserted that these offerings could handle anticipated volumes adequately. Bell Atlantic-New York admitted, however, that if a competitive LEC does not intend to put in its own facilities, and simply wants to market combinations of loops and ports, physical collocation is not a

¹ Tr. 64.

For combining elements, the competitive LEC installs a simple frame cross connect, and Bell Atlantic-New York runs tie cables from the switch and link sides of its MDF to the competitive LEC frame in the cage. In addition, Bell Atlantic-New York would make cross connections at the MDF. A multiplexer allows two or more signals to pass over one communications circuit.

viable method, because it is not cost-effective unless the competitive LEC needs physical collocation to locate other equipment in order to provide service over its own facilities.

Bell Atlantic-New York stated that physical collocation posed minimal reliability or service quality risk since the unbundled network elements would be combined on facilities which, except for the competitive LEC cross-connect frame, are still within its control.² In its estimation, a shared cage would have a slightly higher possibility of adverse impact because of commingling of equipment of several carriers.

Bell Atlantic-New York stated that these physical collocation methods allow a competitive LEC easily to migrate a customer to its own facilities-based service, since the customer's loop is already terminated at the competitive LEC cross-connect frame; the competitive LEC would only have to add transmission equipment. Further, Bell Atlantic-New York asserted these methods allow a customer to easily migrate back to Bell Atlantic-New York or to another competitive LEC.

While physical collocation assertedly makes simple the transfer of customers currently physically connected to Bell Atlantic-New York's switch, another step is required for the customers currently served by digital technology. Links of customers served by Integrated Digital Loop Carrier (IDLC) could not be as easily unbundled. Bell Atlantic-New York noted that it would have to transfer the customers' service either to Universal Digital Loop Carrier (UDLC) or to an available copper pair,

¹ Tr. 137.

² Tr. 140.

³ Tr. 141.

⁴ Tr. 142.

 $^{^{\}scriptscriptstyle 5}$ Bell Atlantic-New York Response to Data Request 4.5.

⁶ Tr. 120.

before a competitor could combine the loop with either its own or a Bell Atlantic-New York port.

Some competitors found traditional physical collocation often unavailable, sometimes technically unnecessary, and prohibitively costly; some, however, supported the 25-square foot cage alternative. Others warned of the negative impact on network reliability and service, as order volumes dramatically increase, and of longer repair times portended by the additional test points inserted by this or any other physical method.

1. Proposed Findings and Exceptions

The Judge expressed concern as to traditional physical collocation as a nondiscriminatory offering for the purpose of allowing competitors to access and combine the incumbent's unbundled network elements. In the Judge's view, the record gave cause for concern about space availability for new competitive LECs. The availability of space in over 400 offices is unknown. While the addition of the 25-square foot cage option might alleviate the space shortage, it is a limited solution. record indicated shared space might not provide for easy migration to facilities-based service if more space is needed for transmission equipment and the loops have to be moved to another location. In addition, the smaller space was not shown to be sufficient for combining services other than POTS. 4 The ALJ also concluded that the record revealed that Bell Atlantic-New York can construct a limited number of physical collocation arrangements of all types in a month--15 to 20.5 Combined with

¹ Tr. 195-96.

² Tr. 181.

³ Tr. 200.

⁴ Tr. 212.

⁵ Tr. 157.

the 76- to 105-business-day-wait to build a cage--and that only if forecast by the competitive LEC--market inroads via combining elements will be tediously slow, insufficient to handle possible ubiquitous mass market entry on a commercially reasonable schedule. Further, Bell Atlantic-New York conceded that the cost of collocation, if used strictly for combining unbundled elements, was not attractive.

The Judge proposed finding that traditional physical collocation is a commercially reasonable and highly effective method for competitive LECs to obtain and combine elements where the competitive LEC is already collocated or intends to collocate for additional purposes; however, traditional physical collocation was not recommended as an economical choice solely for the purpose of combining Bell Atlantic-New York-provided loops and ports; nor was it shown to be ubiquitously available statewide. Small-cage and shared-cage collocation mitigate the cost burden, but were seen to have capacity and security limitations.

Bell Atlantic-New York excepts to the proposed finding that its collocation capacity may be too limited, citing subsequent capacity expansion. It also excepts to the conclusion that its alternatives may not support mass marketing by competitors, asserting standard physical collocation is available in 90% of the offices in which it has been requested. In its view, what is lacking for mass market competition is competitive LEC planning and participation. It notes that high volume, high revenue business customers can currently be reached by competitors using physical collocation, asserting the marketplace for high speed services is already considered competitive. To support its view, Bell Atlantic-New York points to its success in collocation installations for COVAD, asserting it worked "with COVAD in establishing dozens of new sites, 28 in the month of July;" Bell Atlantic-New York asserts there "is no legitimate"

¹ Tr. 180.

basis for concern about BA-NY's capacity to provide physical collocation."

On reply, however, COVAD characterizes Bell Atlantic-New York's practices as "antiquated" and asserts its collocation performance has fallen far short.²

AT&T notes seven other state commissions' negative findings with respect to physical collocation as a method of network element combination. In AT&T's view, collocation—even for CLECs using installed cages to reach remote switches—does not replace electronic provisioning. It also notes that smaller cages are too small to accommodate advanced services, and therefore unsuited to serve the business customers for which the UNE platform will be unavailable.

In addition, AT&T excepts to what it terms the assumption of the Proposed Findings that Bell Atlantic-New York routinely meets the 76-day provisioning requirement. AT&T asserts the evidence shows the incumbent cannot and does not.

2. Discussion

In light of the allegations of COVAD, and other CLEC complaints, further examination is necessary before concluding that Bell Atlantic-New York is providing physical collocation at an acceptable level. Although Bell Atlantic-New York correctly notes that physical collocation need not be available in every central office, this record is incomplete as to its actual availability where offered. Conditional upon a further finding of the efficacy of the provision of physical collocation, in the context of agency verification of compliance in connection with the Bell Atlantic-New York application to the FCC pursuant to

Bell Atlantic-New York's Brief on Exceptions, p. 5.

² COVAD asserts that although 26 cages were turned over to COVAD in July, not one met COVAD's specifications. COVAD's Reply Brief on Exceptions, pp. 1-2.

AT&T cites Massachusetts, Washington, Iowa, Florida, Montana, Texas, and Kentucky. AT&T Reply Brief on Exceptions, p. 4.

§271 of the Act, this method will be approved as part of the menu of options.

Option II -- Secured Collocation Open Physical Environment (SCOPE) (Bell Atlantic-New York)

SCOPE is a physical collocation area located in a secured part of the central office, separated from Bell Atlantic-New York equipment but without a cage enclosure around the competitive LEC equipment. SCOPE entails a conditioned environment identical to a traditional physical collocation environment. The SCOPE is isolated from the Bell Atlantic-New York central office environment, differentiating SCOPE from virtual collocation. Using SCOPE, the collocator is responsible for the installation and maintenance of its equipment. SCOPE uses a shared point of termination (SPOT) bay¹ that may be shared with other competitive LECs using SCOPE. The collocator can place equipment in this arrangement and expand its capacity by adding increments to the frames on the SPOT. SCOPE requires substantially less space per competitive LEC--approximately 15 square feet--than traditional physical collocation.

Bell Atlantic-New York asserted that SCOPE is a workable method of collocation and that it had the capability to implement SCOPE now for anticipated volumes.² The interval for provisioning a SCOPE collocation arrangement is 76 business days, although adding a second competitive LEC to an already established SCOPE arrangement may reduce the required installation time.

As to cost effectiveness, Bell Atlantic-New York and some competitive LECs agreed that SCOPE, although less expensive

A point of termination bay is a small distribution frame adjacent to a collocation area. It is used to cross-connect incumbent LEC cabling from an MDF to the competitive LEC cabling. A SPOT bay is used for multiple competitive LECs.

² Tr. 332.

than traditional physical collocation, is not the plan for a competitive LEC to use solely for loop and port combinations.

All parties agreed that SCOPE was demonstrated to be a workable collocation arrangement, and advisory Staff observed such an arrangement in operation in a competitive LEC central office. The facilities-based competitive LECs believed SCOPE was a viable alternative collocation option, but unnecessary simply as a method to combine unbundled network elements. Other competitive LECs agreed that SCOPE worked, but considered it altogether unnecessary, and feared its provisioning would make a limited work force unavailable for other collocation installations. Also troubling to competitors was the lack of information concerning Bell Atlantic-New York's ability to expand MDFs as necessary to accommodate anticipated demand for collocation-based rebundling.

As to migration of customers, AT&T asserted this method failed to provide parity with Bell Atlantic-New York because of the additional cross-connects required of competitors. In addition, it saw SCOPE as limited in that a second competitor acquiring a customer must be collocated in the same central office. Some facilities-based carriers registered that migration to a new carrier using the combination of SCOPE and extended link was what they needed, fearing SCOPE's limitation that competitive LECs must be collocated in the same central office, and that extensive coordination may be necessary between the affected carriers.

¹ Tr. 333.

² Tr. 403, 413.

³ Tr. 401.

⁴ Tr. 335.

1. Proposed Findings, Exceptions, and Collaboration

The Judge found SCOPE advantageous to facilities-based competitive LECs, and they generally supported it, in part because SCOPE reduces both the amount of time and the cost for installation of cabling. On the other hand, the Judge found installation of a SCOPE arrangement remained a lengthy process—the interval is 76 business days, or approximately 60 business days if it is the second competitive LEC in an established SCOPE area. The Judge also warned that the security risk assumed by the competitive LECs using SCOPE is greater than in a traditional secured physical collocation environment.

The Judge also remitted for collaboration the competitors' request to modify SCOPE to permit them to run cross-connects among their installations, currently not allowed by Bell Atlantic-New York. Competitive LECs protested that Bell Atlantic-New York requires them to purchase either its tariffed dedicated cable support or dedicated transit service to connect their equipment in the SCOPE offering, while in a shared collocation cage competitive LECs are free to cross-connect among their installations without restriction. This issue was explored by the parties during the collaborative sessions.

In collaboration, Bell Atlantic-New York agreed to offer competitive LECs the opportunity to connect to other competitors in a contiguous area of the central office by installing their own cabling on either their own dedicated or Bell Atlantic-New York's racking. This offering is approved. As to connection of non-contiguous installations, Bell Atlantic-New York offered this arrangement only where one competitive LEC is

-

See e.spire's Brief, p. 6; Tr. 269, 433; Bell Atlantic-New York Responses to Record Requests 15.5 and 19.

the record owner of the space in both locations. This is an unwarranted limitation and is rejected.

The Judge also recommended, in light of security and network reliability concerns, that competitive LECs be required to place locked cabinets around their equipment or institute other security measures; and that the security problem be discussed in the scheduled collaboration. The collaborative group developed nine security options from which competitive LECs may choose, to match security to specific competitive LEC installations; and a model log to be signed by those with access to the SCOPE area. With two modifications, the collaborative security recommendations are approved. First, the recommendation is approved that collocators clearly identify their equipment area; however, they need not be restricted to any particular identification method. Second, the recommendation to employ video surveillance equipment is approved; however, it need not be mandatory.

2. Discussion

As one offering in a menu of choices, SCOPE affords another physical collocation method entailing less space and investment than traditional physical collocation. With the addition of the security and cross-connection arrangements agreed to in the collaborative process, as modified herein, SCOPE will be approved.

Option III -- Identified Space Collocation (COVAD)

Under this proposal a collocator would install and maintain its own equipment in a defined space within the

Bell Atlantic-New York's offering is Appendix B. In the course of the collaboration, parties also agreed to a spectrum management protocol (Appendix C) to avoid communications signal interference resulting from the close proximity of carriers' cabling. No party objected to this protocol, and it is adopted.

² The security options are attached as Appendix D.

incumbent's central office, to purchase all services and combine all network elements. Competitive LEC equipment would be placed in identified racks dedicated to particular collocators; in this sense it is segregated from Bell Atlantic-New York's equipment. The equipment, installation and procedures involved would meet standard industry requirements. Collocators would pay pro-rata rental charges for the central office space utilized.

Since collocator personnel and equipment are not physically segregated from the incumbent's, alternative security arrangements are of particular significance in this proposal. An Intermedia variation is to allow competitive LEC personnel escorted by a Bell Atlantic-New York security escort into the incumbent's central office to access virtually collocated equipment.¹

COVAD asserted this method made the best use of all available central office space, and argued that potential network security issues were overblown by Bell Atlantic-New York, suggesting security measures be tailored to the circumstances of each central office.

Some competitive LECs (e.spire and Intermedia) actively supported this proposal while Cablevision maintained that cageless collocation was "necessary if competitive LECs are to be able to compete." Intermedia suggested the use of escorts furnished by the incumbent to resolve the security issue. Other competitive LECs, while not opposing this method of collocation, considered it subject to the shortcomings of other types of collocation for the purpose of combining unbundled network elements.

Bell Atlantic-New York urged that this method would deny it the ability to maintain adequate security over its own network facilities, considering the resulting risks to its

Intermedia's Brief, p. 7.

² Cablevision's Brief, p. 10.

network and customers to be unacceptable. Bell Atlantic-New York emphasized the large number of competing carriers that would have access to its otherwise secure facility areas.

1. Proposed Findings and Exceptions

The Judge concluded that the record established COVAD's option was viable; however, the network security issues were troubling. On these issues, she concluded the record was not adequate to support a recommendation that Bell Atlantic-New York be required to provide this option, referring these issues to collaboration. On exceptions, Time Warner argues carriers willing to accept reduced security should have that option.

2. Discussion

In the course of the collaborative process, Bell Atlantic-New York offered collocation with escort.² The offering appealed to participating competitive LECs; however, objections were raised to the requirement that Bell Atlantic-New York central office technicians visually supervise competitive LEC or third-party vendors; the exclusion of central offices where Bell Atlantic-New York has already provided 200 square feet of physical collocation space; and the restriction of its use to obtaining Bell Atlantic-New York unbundled network elements.

The Bell Atlantic-New York collocation with escort offering effectively expands the menu of available collocation options and is approved, with modifications. In light of network reliability concerns, we will adopt the incumbent's supervision requirements. However, the restrictions to certain central offices and certain services limit this offering unnecessarily.

¹ Bell Atlantic-New York's Summary Presentation, p. 5.

This Bell Atlantic-New York offering is Appendix E. The inclusion of supervised third party vendors satisfies Intermedia's expressed concern that third party vendors be allowed.

This option should be available for all services purchased under intrastate tariffs and interconnection agreements.

Option IV -- Virtual Collocation (Bell Atlantic-New York)

Bell Atlantic-New York currently offers virtual collocation, an arrangement by which the competitive LEC purchases equipment it wishes to use, and Bell Atlantic-New York exclusively installs and maintains the equipment on the competitive LEC's behalf. This arrangement could be used by a competitive LEC to recombine loops and ports through the use of a remotely controlled cross-connect device, or robot. Once the device is installed, Bell Atlantic-New York loops and ports could be terminated on the equipment and the competitive LEC could remotely recombine them. Bell Atlantic-New York would use its existing "hot cut" procedures in connecting its network to the device. 1

Virtual collocation arrangements are, of course, already used, and Bell Atlantic-New York uses this type of cross-connect device in its network, albeit not for element recombination. Bell Atlantic-New York indicated that two competitive LECs are currently implementing these systems in New York.² The implementation period for virtual collocation is 105 business days; however, with only 12 robots in service, the ability of CON-X to manufacture sizable quantities has not been

Bell Atlantic-New York provided a demonstration at the technical conference of this device, produced by CON-X Corporation (CON-X). This device can be mounted in a standard equipment relay rack in a Bell Atlantic-New York central office. Using a robotics arm, the device places or removes connections as directed by the competitive LEC from a remote work station. The CON-X robot can accommodate up to 1,400 loops, which it can connect to Bell Atlantic-New York and/or competitive LEC ports.

² Tr. 502.

tested. That company has been able to deliver a robot within 60 days of order. 1

As to this method's ability to handle foreseeable volumes of transactions, Bell Atlantic-New York was enthusiastic; however, as to cost-effectiveness, Bell Atlantic-New York rated this method somewhat lower, allowing that if all a competitive LEC wanted to do was reconnect loops and ports other options might be less expensive.

As to the ease of migration of customers to competitors' facilities-based service, Bell Atlantic-New York was very positive, inasmuch as the CON-X robot allows for the simultaneous connection of Bell Atlantic-New York and competitive LEC ports. Migrating a customer from a Bell Atlantic-New York port to a competitive LEC port can be done quickly and remotely with the robot. Regarding ease of migration of customers to a second competitive LEC or back to the incumbent, Bell Atlantic-New York considers this method excellent for migration back to its system, but slightly less so for migration to another competitive LEC, similar to its ratings for the other collocation methods.

This method was rejected by all other parties. Generally, competitors saw it as adding another layer of expensive and potentially troublesome equipment into the network for the recombiners. This method also garnered considerable criticism from parties as to timeliness of provisioning. There was concern about the availability of robots and about the ability of competitive LECs to use the system without extensive training. Similarly, parties were unenthusiastic about this method's cost, stating that the system was really nothing more than an expensive pre-wired frame. Indeed, competitors saw no advantage--and saw considerable additional expense--in purchasing

¹ Tr. 512.

this equipment, as opposed to installing a pre-wired frame in a conventional virtual collocation arrangement.¹

1. Proposed Findings and Exceptions

The Judge proposed finding that Bell Atlantic-New York's offering did not appear to meet the concerns of most competitors, and that the robot requirement added unnecessarily to virtual collocation costs. She referred to collaboration the issue of allowing competitors to provide pre-wired frames.

Parties did not reach agreement in the collaborative process. On exceptions, Bell Atlantic-New York objects to this option because its workforce would be responsible for all testing and maintenance, and it would be liable for performance failures. It also notes that no competitor is currently seeking to use this method. Competitive LECs assert that they would compensate Bell Atlantic-New York for testing and maintenance.

2. Discussion

Although no competitor is seeking this option today, several indicated future interest; prewired frame may emerge as a viable market entry strategy. Because of the absence of immediate interest, Bell Atlantic-New York should make this option available on a Bona Fide Request basis.

Option V -- Assembly Room and Assembly Point (Bell Atlantic-New York)

The assembly room and assembly point are innovative options that Bell Atlantic-New York proposed to offer competitive LECs who seek to combine Bell Atlantic-New York links and ports. These options do not require the same conditioned space as traditional forms of collocation, and would therefore be less costly to competitive LECs not using any of their own elements. The assembly room would be located in an secure, unconditioned area of a Bell Atlantic-New York central office and could be

-25-

 $[\]frac{1}{2}$ See, for example, Tr. 526-527.

shared by a number of competitive LECs.¹ The assembly point would be used in central offices where constructing an assembly room within the building is not feasible. The assembly point would offer competitive LECs the same technical means of combining Bell Atlantic-New York links and ports, but would either be mounted on the outside wall or pad mounted on the grounds of the central office.² The assembly room or point only provides access for voice grade loop and port combination.

The assembly room or point would initially be subject to the same 76-business-day interval used for traditional physical collocation. Subsequent entrants would be able to obtain space in the assembly room or point more quickly. Competitive LECs would be assigned a termination frame or portion of a termination frame, and could either pre-wire the frame or perform cross-connections as they acquire customers. The actual process of transferring a customer from Bell Atlantic-New York to the competitive LEC would be accomplished by Bell Atlantic-New York technicians performing a manual or hot cut. While Bell Atlantic-New York had yet to construct an assembly room or point by the close of this record, the technology involved is not new or complicated and it would not be difficult for Bell Atlantic-New York to demonstrate its ability to deliver this service.

Bell Atlantic-New York stated that the assembly room/point could handle reasonably foreseeable volumes, and that the assembly room/point was designed specifically for the combination of Bell Atlantic-New York loops and ports, and therefore highly cost efficient. Because the assembly room/point would not require conditioning, it would be less

¹ Tr. 553-554.

Bell Atlantic-New York has indicated that it may in some cases place an assembly point in an unsecured location within its central offices (Tr. 558, 570).

³ Bell Atlantic-New York's May 27, 1998 filing, p. 19.

⁴ Tr. 561.

costly to a competitive LEC seeking to combine Bell Atlantic-New York voice grade loops and ports than other collocation options, according to Bell Atlantic-New York's preliminary cost estimates. 1

Concerning whether the method minimized potential adverse impacts on end users, Bell Atlantic-New York noted that the assembly room/point offered a slightly less secure environment than traditional collocation. Bell Atlantic-New York noted, however, that competitive LECs could install locking covers to be used within the assembly room for added security. Because the assembly room/point uses the same hot cut procedure as other methods of combining elements, end users should not be adversely impacted if competitive LECs choose this method over others.

Bell Atlantic-New York noted that it would be more difficult to migrate a competitive LEC customer from elements combined via an assembly room/point to the competitive LEC's facilities-based service than with the more traditional collocation options, and therefore rated this method lower in that category. As to migration back to Bell Atlantic-New York or to a competitive LEC using the Bell Atlantic-New York network, Bell Atlantic-New York rated the method very highly. For customers migrating to a facilities-based competitive LEC, Bell Atlantic-New York rated the method slightly lower, because the two competitive LECs would have to coordinate the cutover. As with the question of moving a customer served by a competitive LEC via the assembly room/point to that competitive LEC's own facilities-based service, this transition could be difficult and has the potential to impact customer service.

¹ Response to Data Request #22, as revised July 10, 1998.

² Tr. 561.

³ Tr. 572.

⁴ Tr. 563.

As to timeliness of implementation competitors asserted that, in reality, this method of combining elements cannot be implemented quickly, particularly for the first competitive LEC in a given Bell Atlantic-New York central office. The interval for the initial competitive LEC would be 76 business days, and for subsequent competitive LECs or subsequent orders from the initial competitive LEC the interval would be 60 business days. 1 Further, the same Bell Atlantic-New York personnel now responsible for the construction of physical collocation arrangements would be responsible for assembly rooms/points, and Bell Atlantic-New York has committed to provision only 15 to 20 collocation arrangements of all types per month.² Parties asserted that the assembly room/point cannot meet reasonably foreseeable volumes of competitive LEC orders for such arrangements statewide because the initial construction is so time-consuming.

According to competitors, certain element combinations, for example, the loop and transport combination, would not be accessible via this method. Nor would this option be available by competitors using a T1 loop to serve customers. Competitors also correctly noted that this method would make it very difficult for competitive LECs to migrate customers to their own facilities, as a facilities-based competitive LEC would locate its equipment in conditioned space and the assembly room or point would be unconditioned space. The competitive LEC would therefore have to have each customer's loop terminations moved from the assembly room/point to the collocated space.

¹ Tr. 556.

² Tr. 581-582.

³ Tr. 590, 613; CompTel's Brief, p. 4.

⁴ Tr. 600-601.

1. Proposed Findings and Exceptions

Overall, the Judge found the assembly room/point concept to be a creative, viable, economic way for competitive LECs to combine loops and ports in several central offices in the state. Because of the absence of any electronics in the assembly room/point, 1 she found, this method probably has the least potential to adversely affect Bell Atlantic-New York's network of any of the collocation options. Because of the time delay associated with the installation of new assembly rooms or points, however, the ALJ concluded this would not be a feasible statewide entry strategy for even one competitive LEC. She warned that if competitive LECs were to attempt to use this method on a broad scale, Bell Atlantic-New York could be hampered in its ability to deliver traditional collocation arrangements to facilities-based competitive LECs. Moreover, she noted, this offering is limited only to voice grade loop and port combinations. On balance, the ALJ proposed finding that assembly room and assembly point are innovative and useful offerings for lower-cost collocation; several competitors indicate a strong interest in using them. However, their limited applicability and substantial provisioning intervals do not make them effective for statewide mass market entry.

AT&T excepts to the Proposed Finding approving the assembly options noting that, because they are only available to combine voice grade loops and ports, they will not mitigate the loss of the platform for service to New York City business customers, likely to demand higher grade service.

2. Discussion

The assembly room and point option are economical for their limited purpose, contribute flexibility to the Bell Atlantic-New York menu, and will be approved. Several competitors indicate a strong interest in using them. However,

¹ Tr. 576.

they are unlikely to reduce competitive pressures for access to combination of elements to serve business customers.

Option VI -- Recent Change Capability (AT&T)

Recent change capability refers to software-based tools, comparable to those that allow a LEC to update and assign features and functions of its local switch. According to AT&T, the recent change capability is now used by incumbent LECs to disconnect a loop from the switch, that is, to sever service to a customer. Recent change is also comparable to the services afforded a Centrex customer to sever, modify, add functions, or transfer service to an identified family of loops.

1. Feasibility--The Factual Issue

AT&T's proposal was that Bell Atlantic-New York develop or purchase software to allow competitive LECs to employ recent change technology to combine existing loops and ports on the same basis that Bell Atlantic-New York now does. AT&T conceded that this option was not readily demonstrable, although it suggested that Bell Atlantic-New York Centrex customers employ this technology to add or sever lines, add services, or transfer numbers.² As to recent change's ability to handle volume, AT&T asserted this method would be able to handle volumes in a manner and on a scale comparable to how presubscribed interexchange carrier changes--millions of transactions yearly--are now effected.³ According to AT&T, the operation of recent change would be extremely cost effective, once developed, since it is an electronic rather than a manual method of recombining elements.⁴ AT&T asserted this method, because it minimizes manual loop

¹ Falcone Affidavit, June 16, 1998, ¶¶105 et seq.

Tr. 672. AT&T estimated development time at roughly one year. Tr. 656.

³ Tr. 678.

⁴ Tr. 678-679.

manipulation, will minimize adverse impacts on end users. A firewall, proposed AT&T, would protect the incumbent LEC by restricting competitor access to its customers and links. AT&T describes its firewall security as standard: transactions are controlled based on the rights and privileges of the user logged into the firewall. Migration to another competitor or to the incumbent would be as simple as changing long distance providers as long as the other competitive LEC also has recent change access. Similarly, it would be simple to migrate back to the incumbent LEC.

In a post-technical conference supplemental filing, CommTech, the vendor/developer of the software proposed by AT&T to implement recent change, explained that this new software would consist of a modification of its FastFlow system currently employed by LECs to allow Centrex customers to access the recent change process in the LEC switch. Bell Atlantic-New York acknowledged the capability of Centrex customers to make limited changes to the switch, using Macstar. However, it estimated the development time required for this to be implemented on the scale contemplated here as "a number of years". As to cost, Bell Atlantic-New York asserted that the front-end development costs for the firewall, as well as the competitive LEC interface, render recent change prohibitive. Bell Atlantic-New York suggested that its legacy systems are complex, and difficult to modify, 1 listing the systems a firewall system would need to reference in order to effect the changes required to move a

¹ Tr. 680.

² Tr. 681-682.

³ Tr. 684-686.

⁴ Tr. 747-748.

⁵ Tr. 755.

⁶ Bell Atlantic-New York's Summary Presentation, p. 13, n. 25.

⁷ Albert Affidavit, July 10, 1998.

customer from the incumbent to a competitor, or between competitors. According to Bell Atlantic-New York, millions of lines of code would have to be written to realize the system modifications required for recent change. In response to AT&T's supplemental filing concerning its recent change proposal, Bell Atlantic-New York asserted that recent change is inadequately documented, ambitious, and burdensome.

Bell Atlantic-New York also stressed AT&T's admission that this approach imposes a risk of significant customer outages, with some customer outages inevitable due to problems between the processing of messages to suspend and restore service. Bell Atlantic-New York asserted that, inasmuch as the recent change proposal will, according to the vendor, work best if operated by Bell Atlantic-New York itself through its provisioning system, the proposal was little more than a loop and port combination provided by Bell Atlantic-New York. Facilities-based competitors viewed recent change as violative of parity because it potentially relieved competitors without their own facilities from the burden and risk associated with manual interconnection.

The Judge concluded that, while AT&T had failed to present a convincingly detailed case for recent change, its fundamental assertion was well founded: an electronic method for obtaining and combining network elements, or a comparable substitute, appeared essential for mass market competition. Because of the importance of exploring and developing software methods for competitors to obtain and combine unbundled network elements, she remitted this issue for collaboration.³

¹ Albert Affidavit, ¶9, quoting AT&T's Comments, p. 67.

² Albert Affidavit, ¶18, citing CommTech Affidavit, ¶8.

The Judge also recommended that the costs of development of recent change should be borne, at least in part, by competitive LECs. Time Warner seeks clarification that development costs should be apportioned based on competitors' use of recent change during its first year.

On exceptions, WorldCom asserts Bell Atlantic-New York must make recent change available and, with DOD, excepts to the failure to establish a date certain by which it must be provided. TRA, on exception, reiterates that only recent change offers competitors parity. AT&T stresses the increased likelihood of human error attendant upon adding numerous manual, mechanical connections, compared to developing an electronic recombination method.

In the course of the collaborative discussions, AT&T developed its proposal in greater detail and depth. Parties differed dramatically, however, as to the time necessary to develop the recent change method.

2. Physical Separation and Reconnection-the Legal Issue

Bell Atlantic-New York asserted the Act and the Eighth Circuit decision require a physical separation or unbundling of network elements, and a concomitant physical recombination of these elements by competitors. In its view, AT&T's recent change proposal or, for that matter, any method not entailing physical, manual disconnection of the loop from the port, fails the Eighth Circuit test. AT&T replied that taking the customer out of service by electronic, as opposed to manual, means complied with the Eighth Circuit requirements.¹

Judge Stein recommended that while ubiquitous, timely recombination of elements, consistent with mass market entry, is essential, that requirement was best fulfilled in New York at this time by the Pre-filing terms and conditions, in conjunction with Bell Atlantic-New York's other offerings. In her view, the only electronic method under consideration for competitors to

In MCI's view, by contrast, neither the incumbent nor the AT&T options comply with the Act; MCI urges the Commission to hold that only by providing competitors with specific alreadycombined elements will Bell Atlantic-New York be consistent with §251(c)(3). As this proceeding was narrowly defined to consider options for competitor recombining of elements, MCI's proposals were not admitted at the technical conference.

combine elements themselves, AT&T's recent change proposal, was insufficiently developed to be adopted at this time. She suggested further exploration of the development of this option in relation to the incumbent's existing or legacy systems in the collaborative phase.

As a threshold matter, the Judge recommended the finding that an electronic system that functionally unbundles and recombines elements complies with the Act, noting the Eighth Circuit wording that a competitor need not have facilities of its own in order to obtain access to the incumbent's network elements.¹

On exceptions AT&T, TRA, WorldCom and CompTel assert that only with recent change or a comparable electronic technology will Bell Atlantic-New York comply with the Pre-filing and the Act.

Bell Atlantic-New York and Time Warner except to the Judge's recommendation that electronic unbundling and recombination fulfill the requirements of §251(c)(3) of the Act. In Bell Atlantic-New York's view, the recommendation to approve functional rebundling is unacceptable, as the unbundled loop and switch port are physical elements that must be physically combined by competitive LECs to be used. It reiterates its view that the first principle of elements is that they are physically defined, and that simply turning off the line at the switch via a software command does nothing to disconnect the loop and port. In its view, the Judge's recommendation improperly eliminates the Act's distinction between resale and unbundled network element purchase, and would move the competitive LEC industry away from facilities-based competition. MCI, although not excepting, requests clarification that Bell Atlantic-New York's commitment to provide recombination at parity does not expire with the Prefiling and, conversely, that a Bell Atlantic-New York provision

The term "network element" includes "features, functions, and capabilities." See 47 U.S.C. §153(29).

of a software recombination method does not obviate the Prefiling platform commitment.

3. <u>Discussion</u>

Based on the record before us, taken in conjunction with the platform, Bell Atlantic-New York's collocation-based menu should enable competing carriers reasonable and non-discriminatory access to unbundled elements in a manner that ensures their practical and legal ability to combine them. This finding is conditioned on Bell Atlantic-New York demonstrating its ability to process and deliver collocation-based orders in a timely and reasonable manner. Thus, assuming these conditions are met, the company will satisfy this Pre-filing obligation. Because we will not require Bell Atlantic-New York to build recent change capability at this time, it is premature to decide this legal issue.

This Commission has long been committed to the development of a fully competitive local exchange market; to wit, multiple carriers providing a full range of services throughout New York State. Such a market cannot develop unless customers are able to switch easily to the local exchange provider offering the service, price and quality options that best meets their needs. As we move to a fully competitive local exchange market, we will periodically revisit our finding that if Bell Atlantic-New York's collocation-based recombination offerings satisfy the standards described above they, in conjunction with the platform required by the Pre-filing, will comport with Bell Atlantic-New York's recombination commitment.

Our periodic review will focus, in particular, on whether the collocation-based methods allow competitive LECs to combine elements to provide service. If the collocation-based methods have provided adequate entry for a wide range of

Case 94-C-0095, <u>Regulatory Framework for the Transition to Competition in the Local Exchange Market</u>, Opinion No. 96-13, pp. 2-3 (issued May 22, 1996).

competitors, as we expect, additional action will not be necessary. If, however, competing carriers do not "have reasonable and non-discriminatory access to unbundled elements in a manner that provides competing carriers with the practical and legal ability to combine unbundled elements" we will act.

While our desire to encourage the development of facilities-based competition and preserve investment by facilities-based entrants will cut against extension or replacement of offerings resembling the platform, our overriding policy of fostering an open competitive market will result in corrective action, if necessary, to ensure that competitive LECs have access to unbundled elements in a manner that enables them to combine elements to provide service. Any responsive action on our part will depend on the status of the factors affecting opportunity for competitive entry.

Accordingly, while we do not order Bell Atlantic-New York immediately to build recent change capability, we believe the incumbent should continue productive discussions with all interested parties, and Staff, and apprise us periodically of its progress. We do not reach the question of cost allocation for the development of recent change capability; however, we expect competitive LECs to recognize that, generally, competitors using such technology would be expected to shoulder a proportionate share of the cost, consistent with principles of competitive neutrality and cost causation.

THE TWO-COLLOCATION CENTRAL OFFICES

In its Pre-filing, Bell Atlantic-New York undertook to provide the complete unbundled element platform for the provision of residence and business POTS and ISDN service, subject to time and geographic restrictions. Specifically, the platform will be provided for a duration of 4 years in zone 1, and 6 years in

-

¹ Bell Atlantic-New York Pre-filing, p. 10.

zone 2,¹ except that, in central offices in New York City where two or more competitive LECs are collocated to provide local exchange service through unbundled links at the start of the duration period, the platform will not be available for business customers.² At the time of the proposed tariff filed by Bell Atlantic-New York on July 23, 1998, eleven central offices met this definition.³

Proposed Findings and Exceptions

The Judge found that Bell Atlantic-New York's proposed methods for competitors to combine elements, with the provision of the platform in all but this limited number of offices, would give competitors a viable market entry strategy statewide and afford end users choice among providers. For the limited number of offices in which the platform will not be available for service to business customers, she found, Bell Atlantic-New York's methods for combining elements would likely be sufficient for those carriers not already collocated in the affected offices. However, before Bell Atlantic-New York can be found to meet the Pre-filing standard, the ALJ concluded, Bell Atlantic-New York should demonstrate that the main distribution frames in each of these offices have sufficient capacity, or can be expanded in a timely manner, to handle reasonably foreseeable volumes of cross-connects, and should provide us and the parties the specifications as to space constraints in each of those offices, and guarantees that there is sufficient space available for an acceptable range of recombination options.

Zone definitions are as established by the Commission in Cases 94-C-0095, 95-C-0657, and 91-C-1174.

The duration periods start with the demonstration of availability of certain operations support system upgrades.

These were: Second Ave., Bridge St., Broad St., East 30th, 37th, and 56th Streets, West 18th, 36th, 42nd, and 50th Streets, and West Street. New York Telephone Company P.S.C. No. 916, Section 5, Appendix B, Original Page 1.

AT&T, Sprint, Qwest/LCI, RCN, and LCN, joined by MCI, except to what they view as business service restrictions on the UNE platform in New York City: the restriction of the platform to POTS and basic rate ISDN; the prohibition of UNE platform for business customers in the two-collocation central offices; and the duration of the offering and glue charges in the Pre-filing. In these competitors' view, the Pre-filing commits Bell Atlantic-New York to provide the platform in all locations without charge until it demonstrates competitors have nondiscriminatory access to elements to recombine them, and the Judge incorrectly recommended that the current offerings, plus the Pre-filing, were adequate to protect competitors seeking to serve business customers.

AT&T also excepts to the proposed finding that the menu of options is sufficient to trigger the Pre-filing restrictions. In AT&T's view, Bell Atlantic-New York failed to demonstrate recombination is commercially available for serving business customers in these two collocation central offices. It also excepts to the Judge's refusal to recommend a conclusion on the legal issues as to whether the two-collocation business restriction is precluded by the Act requirement that competitive LECs have access to elements at any technically feasible point.

Discussion

The Pre-filing cannot be read to require that Bell Atlantic-New York provide unlimited collocation opportunities or make every recombination method equally available at every central office. The two-collocation office exception to the availability of the platform for business customers, embodied in the Pre-filing, recognizes that for those customers, in those areas, there is already a significant measure of competitive access and competitor investment. Similarly, the exclusion of Centrex service from the platform offering reflects that this service is already available on a competitive basis. Approval of the Bell Atlantic-New York menu of recombination offerings will not be final until it demonstrates that an acceptable range of

recombination methods is available to serve business customers in those New York City offices in which two competitors are already collocated.

CONCLUSION

We are adopting every technically feasible method available today for competitive LECs to access element combinations to provide service. Based on an examination of the technologies, terms, and conditions of specific methods currently available for obtaining and combining unbundled network elements, we find that the menu of collocation-based options, as modified herein, can be considered adequate to support recombination of elements to serve residential and business customers on a mass market basis, in conjunction with the provision by Bell Atlantic-New York of the platform, on the Pre-filing terms. Upon certain additional demonstrations competitive local exchange carriers may be deemed to have reasonable and nondiscriminatory access to unbundled elements in a manner that enables them to be combined. These demonstrations consist of: (1) Bell Atlantic-New York's ability to provision all collocation-based forms of recombination, as modified in this order; (2) the provision of the unbundled network element platform under the terms and conditions established in the Pre-filing; (3) resolution by this Commission of issues related to the No. 916 tariff; and (4) the demonstration by Bell Atlantic-New York that competitors will have access to a satisfactory range of collocation alternatives to serve business customers in those New York City central offices in which two competitive LECs are collocated.1

The Proposed Findings are adopted insofar as consistent with this Opinion and Order; and the exceptions are denied, except insofar as granted herein.

¹ Bell Atlantic-New York Pre-filing, p. 9, n. 9, 10.

The Commission orders:

- 1. The Bell Atlantic-New York SCOPE proposal is modified to adopt the recommendations of the collaborative group as to security and cross-connection arrangements and as detailed herein. Bell Atlantic-New York should reflect this determination in its compliance filing with respect to Tariff No. 916 in Case 95-C-0657.
- 2. Bell Atlantic-New York is required to provide, in its No. 916 tariff compliance filing in Case 95-C-0657, the COVAD identified space collocation method, incorporating the Bell Atlantic-New York collocation with escort offering, so modified as to be available for all services purchased under intrastate tariffs and interconnection agreements, at all central offices where such method is technically feasible, with line-of-sight supervision by Bell Atlantic-New York personnel.
- 3. Bell Atlantic-New York is required to provide, in its No. 916 tariff compliance filing in Case 95-C-0657, an offering of virtual collocation with a pre-wired frame on a Bona Fide Request basis.
- 4. The proposed methods for competitive LECs to obtain and combine Bell Atlantic-New York unbundled network elements, as modified herein, in conjunction with the provision by Bell Atlantic-New York of network element combinations pursuant to its Pre-filing Statement, comport with Bell Atlantic-New York commitments. Upon approval of the No. 916 tariff amendments and verification of compliance with the competitive checklist pursuant to 47 U.S.C. §271(c)(2), these methods will be deemed approved.
 - 5. These proceedings are continued.

By the Commission,

(SIGNED) ROBERT A. SIMPSON Assistant Secretary